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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,486	02/20/2004	William Christopher Edwards	LAR 16324-2	2124
23351	7590	09/27/2004	EXAMINER	
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION LANGLEY RESEARCH CENTER 3 LANGLEY BOULEVARD MAIL STOP 212 HAMPTON, VA 236812199			LIEU, JULIE BICHNGOC	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/783,486	EDWARDS ET AL.	
	Examiner	Art Unit	
	Julie Lieu	2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/20/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,714,132. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 1-10 of the present application are similar to the combination of claims 1-5 and 7-9 of US patent 132 except independent claim 1 of the application is broader than claim 1 of US patent 132 in that it does not recite the details of the timing function.

3. Claims 11-19 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29-37 of U.S. Patent No. 6,714,132. Although the conflicting claims are not identical, they are not patentably distinct from each other

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because the combination of claims 11-19 of the present application are similar to the combination of claims 38-46 of US patent 132 except independent claim 29 of the application is broader than claim 38 of US patent 132 in that it does not recite the details of the timing function.

4. Claims 21-30 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29-37 of U.S. Patent No. 6,714,132. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 21-30 of the present application are similar to the combination of claims 29-37 of US patent 132 except independent claim 21 of the application is broader than claim 29 of US patent 132 in that it does not recite the details of the timing function.

5. Claims 31-46 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 29-37 of U.S. Patent No. 6,714,132. Although the conflicting claims are not identical, they are not patentably distinct from each other because the combination of claims 31-46 of the present application are similar to the combination of claims 29-37 of US patent 132 except independent claim 31 of the application is broader than claim 29 of US patent 132 in that it does not recite the timing function.

Claim Objections

6. Claims 1-10 are objected to because of the following informalities: in claim 1, line 3, “encoded signal wireless signal” perhaps should be recited as “encoded wireless signal”.

Appropriate correction or clarification is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2, 2-12, 14-22, and 24-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Flanagan et al. (US 2003/0062996).

Claim 1:

Flanagan discloses a system comprising:

- a. a transmitter 30 for transmitting at least one encoded wireless signal, the at least one encoded wireless signal having a predetermined range of transmission;
- b. means 20, operatively coupled to the transmitter, for detecting the presence of at least one object in a position;

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- c. means 502, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
- d. a receiver 40, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission; and
- e. a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver.

See para. 1022, 1024, and 1026.

Claim 2:

The at least one encoded wireless signal in Flanagan is an RF signal.

Claim 4:

The switch 22 comprises at least one pressure switch. See para. 0042.

Claim 5:

The system of Flanagan's further comprises means, operatively coupled to the receiver controller, for communicating an alarm when the receiver controller issues an alarm signal.

Claim 6:

In Flanagan, the communicating means comprises an audio output 44 for generating at least one audio output in response to the alarm signal.

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Claim 7:

The communicating means further comprises a second means 46, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

Claim 8:

The receiver controller in Flanagan further comprises a replaceable source 914, 916 for supplying power to the receiver, the receiver controller, the at least one receiver controller and the means for generating a first and second alarms.

Claim 9:

The activating means further comprises a replaceable source 514,515 for supplying power to the transmitter, the detecting means, and the activating means.

Claim 10:

In Flanagan, the at least one object is a child.

Claim 11:

Flanagan discloses a safety apparatus comprising:

- a. a child safety seat (see front page figure)
- b. a transmitter 30 for transmitting at least one encoded wireless signal, the at least one encoded wireless signal having a predetermined range of transmission;
- c. means 20, operatively coupled to the transmitter, for monitoring the presence of at least one object in a position;

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- d. means 502, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
- e. a receiver 40, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission; and
- f. a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver.

See para. 1022, 1024, and 1026.

- g. means 46, operatively coupled to the receiver controller, for communicating an alarm to the caregiver when the receiver controller issues an alarm signal.

Claim 12:

The at least one encoded wireless signal in Flanagan is an RF signal.

Claim 14:

The switch 22 comprises at least one pressure switch. See para. 0042.

Claim 15:

In Flanagan, the communicating means comprises an audio output 44 for generating at least one audio output in response to the alarm signal.

Claim 16:

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The communicating means further comprises a second means 46, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

Claim 17:

The receiver controller in Flanagan further comprises a replaceable source 914, 916 for supplying power to the receiver, the receiver controller, the at least one receiver controller and the means for generating a first and second alarms.

Claim 18:

The power source in Flanagan is a replaceable source.

Claim 19:

The activating means further comprises a replaceable source 514,515 for supplying power to the transmitter, the detecting means, and the activating means.

Claim 20:

The power source for the transmitter in Flanagan is a replaceable source.

Claim 21:

Flanagan discloses a system comprising:

- a. a transmitter 30 for transmitting at least one encoded wireless signal, the at least one encoded wireless signal having a predetermined range of transmission;
- b. means 20, operatively coupled to the transmitter, for detecting the presence of at least one object in a position;

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- c. means 502, operatively coupled to the detecting means, for activating the transmitter to generate the at least one encoded wireless signal when the presence of the at least one object is detected;
- d. a receiver 40, remotely located with respect to the transmitter, capable of sensing the at least one encoded wireless signal when the receiver is within the predetermined range of transmission
- e. a receiver controller coupled to the receiver and having a timing function, the timing function timing to a time interval wherein, at the completion of each time interval, the receiver controller (i) repeats the timing function when the at least one encoded signal is sensed by the receiver or (ii) issues an alarm signal when the at least one encoded signal is not sensed by the receiver
(See para. 1022, 1024, and 1026.)
- f. means 44, 46, operatively coupled to the receiver controller, for communicating an alarm to the caregiver when the receiver controller issues an alarm signal.

Claim 22:

The at least one encoded wireless signal in Flanagan is an RF signal.

Claim 24:

The switch 22 comprises at least one pressure switch. See para. 0042.

Claim 25:

In Flanagan, the communicating means comprises an audio means 44 for generating at least one audio output in response to the alarm signal.

Claim 26:

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The communicating means further comprises a second means 46, operatively coupled to the activating means, for generating an audio output when the detecting means senses that the at least one object is in the position.

Claim 27:

The receiver controller in Flanagan further comprises a replaceable source 914, 916 for supplying power to the receiver, the receiver controller, the at least one receiver controller and the means for generating a first and second alarms.

Claim 28:

The power source in Flanagan is a replaceable source.

Claim 29:

The activating means further comprises a replaceable source 514,515 for supplying power to the transmitter, the detecting means, and the activating means.

Claim 30:

The power source for the transmitter in Flanagan is a replaceable source.

Claim 31:

Flanagan discloses a safety apparatus comprising:

- a. means 20 for monitoring the presence of a child in a child seat; and
- b. means, operatively connected to the monitoring means and configured to have first portion 22 affixed to the child seat and a second portion 40 configured to be maintained in the possession of a caregiver to the child, for wirelessly tethering caregiver of the child to the child seat, wherein the wireless tethering means 30 is self-activated when the monitoring means 20 first senses the presence of the child in the child seat and

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wherein the wireless tethering means communicates an alarm to the caregiver when the caregiver ventures beyond a predetermined distance from the child seat without having removed the child from the child seat.

Claim 32:

The wireless tethering means 30 is deactivated when the child is removed from the child seat. That is, when the child seat sensor no longer senses the child in the child seat.

Claim 33:

In Flanagan the alarm communicated to the caregiver is deactivated when the child is removed from the child seat.

Claim 34:

In Flanagan the alarm communicated to the caregiver is deactivated when the caregiver returns to a position within the predetermined distance to the child seat.

Claim 35:

In Flanagan, the alarm communicated to the caregiver and the wireless tethering system is deactivated when the child is removed from the child seat.

Claim 36:

In Flanagan, the alarm communicated to the caregiver is deactivated when the caregiver returns to a position within the predetermined distance to the child seat.

Claim 37:

The first portion of the wireless tethering means comprises a transmitter 30 and the second portion of the wireless tethering means comprises a receiver 40 that are operatively coupled to one another.

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Claim 38:

The rejection of claim 38 recites the rejection of claim 1, except it is a method claim.

Claim 39:

The Flanagan system deactivates the alert system when the child is removed from the pressure sensitive position.

Claim 40:

The Flanagan monitors the pressure sensitive position to detect the presence or absence of the child once the alert system is activated.

Claim 41:

The step for monitoring the pressure sensitive position in Flanagan comprises the act of sensing the weight present in the position.

Claim 42:

The step for communicating an alarm in Flanagan comprises the act of sending an audible sound 44 to the caregiver.

Claim 43:

In Flanagan the step for communicating an alarm comprises the act of sending a tactile vibration to the caregiver. See para 0045.

Claim 44:

In Flanagan when the child is removed from the pressure sensitive position the alarm to the caregiver is inactivated.

Claim 45:

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The system in Flanagan inactivates the alarm to the caregiver when the caregiver returns within the predetermined range of the signal.

Claim 46:

The rejection of claim 46 recites what was discussed in the rejection of claim 31, except it is a method claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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10. Claims 3, 13, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flanagan et al. (US 2003/0062996).

Claim 3:

The detecting means 20 comprises at least one switch 22 to detect the presence of an object. See para. 0042.

It is not clear whether the switch is in open or closed position when the object is not in the position. However, the way the switch is wired into the system as either normal open or closed would not be considered an inventive step because it is merely a choice in design.

Claim 13:

The rejection of claim 13 recites what was discussed in the rejection of claim 3.

Claim 23:

The rejection of claim 23 recites what was discussed in the rejection of claim 3.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on Mon-Fri 9AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Hofsass can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long horizontal flourish extending to the right.

Julie Lieu
Primary Examiner
Art Unit 2636

Sept. 22, 04